

SITE ASSESSMENT REPORT
FOR
THE UNITED AIR CLEANER SITE 1/20/90
CHICAGO, COOK COUNTY, ILLINOIS

TDD: S05-9804-008 PAN: 8A0801SIXX

November 20, 1998

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency and Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Rug	Date: _	11/20/98
Ronald W. Bugg, START Project Manager	-	
Reviewed by: Mary Jane Ripp, START Assistant Program Manager	Date: _	11/20/98
Approved by: Thomas Kouris, SDART Program Manager	Date: _	11/20/98
Thomas Kouris, SDART Program Manager		· •



了一切的人最大的交流的一次最后的最后,更对于多年的对方的思考的《**》是集集**。 **直接发**了。

International Specialists in the Environment

Table of Contents

1...

	Section	<u>1</u>	Page
	1	Introduction	1-1
	2	Site Background	. 2-1
	3	Site Assessment	. 3-1
	4	Analytical Results	. 4-1
i 181	5	Discussion of Potential Threats	. 5-1
	6	Removal Alternatives	. 6-1
	7	Summary	. 7-1
	Append	<u>dix</u>	Page
	A	Photodocumentation	A -1
	R	Analytical Data	R-1

List of Figures

14 FORIT

																						<u>P</u>	ag	<u>ge</u>	
	٠																						2	-2	
																							2	-3	
																							3.	-3	

List of Tables

0.454

M₁ if

 $\mathbf{v}_{\mathbf{i}_{\mathbf{i}_{\mathbf{i}}},\ldots,\mathbf{i}_{\mathbf{i}_{\mathbf{i}}}}$

<u>Table</u>		Page
4-1	Analytical Results Summary	4-2

1. Introduction

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) was tasked by the Emergency Response Branch (ERB) of the United States Environmental Protection Agency (U.S. EPA) to conduct a site assessment at the United Air Cleaners (UAC) site in Chicago, Cook County, Illinois, under Technical Direction Document (TDD) S05-9804-008. START was tasked to prepare and implement a health and safety plan; compile and review background information; subcontract analytical services; document conditions at the site; conduct air monitoring and multi-media sampling; evaluate threats to human health and the environment; and make recommendations and provide options to U.S. EPA as to the potential need for a removal action, further investigation, referral to other government agencies or U.S. EPA programs, or other actions which may be prudent. The site assessment was performed in accordance with the National Contingency Plan (NCP) in the Code of Federal Regulations (CFR) Section 300.415 to evaluate on-site conditions and possible threats to human health, welfare, and the environment. The site assessment was conducted on April 23, 1998, under the authority of the U.S. EPA On-Scene Coordinator (OSC) Keith Cesniak. This report summarizes START site assessment activities.

2. Site Background

2.1 Site Description

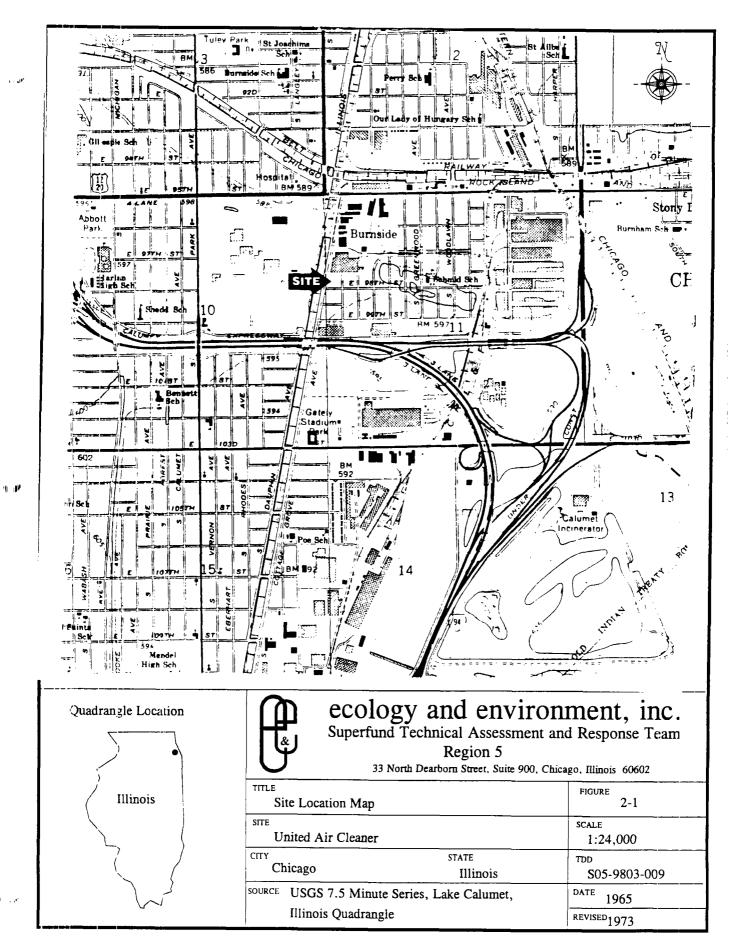
The UAC site is a 2-acre site located at 9701 Cottage Grove Avenue in Chicago, Cook County, Illinois (Figure 2-1). The 25,000-square-foot building includes office, manufacturing, and warehouse areas. Commercial and residential properties surround the facility. To the north is a commercial property, and south and east of the site are residential subdivisions and a vacant commercial lot. West of Cottage Grove Avenue are railroad tracks owned by the Illinois Central Railroad Company (Figure 2-2).

The property is accessible via several doorways throughout the building, which had been vandalized. The transformer staging area, which is directly south of the building, is partially fenced. However, vandals gained access to the area by removing a section of the fence. The copper material inside three transformers has been scrapped and the soil surrounding the transformers was stained.

2.2 Site History

Standard P.

UAC manufactured air filters for diesel engines in large equipment and trucks. The facility operated until February of 1997, and the property is presently for sale.



2-3

Ę

3. Site Assessment

At 0900 hours, on April 23, 1998, START members Ron Bugg and Karen Kirchner met with OSC Lesniak at the site. The group discussed the site investigation, and reviewed the health and safety plan. The OSC and START members began a general reconnaissance of the site in level C personal protective equipment (PPE). The facility was in poor condition; vandals had scattered debris on the floor, and there was a major break in the main line of the sprinkler system in the front of the building. The southwest section of the facility, which was used as a warehouse area, was covered with 3 to 6 inches of water.

Asbestos-containing material (ACM), which was used as boiler insulation, was removed in several areas and discarded onto the floor of the boiler room by vandals. Additional material from the light and the heating systems in the offices of the northwest section of the facility were removed.

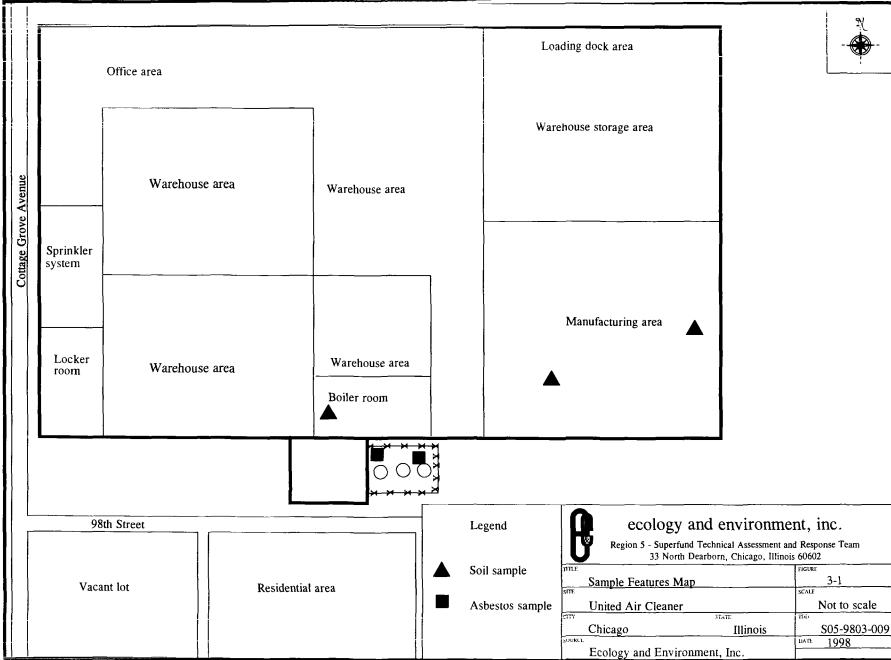
The northeast and the southeast sections, which were the manufacturing areas, contained several scattered pallets of air filters. Several drums, which were either empty or used as nonhazardous waste receptacles, were located throughout the manufacturing area. One half-full 35-gallon drum containing a mixture of tar and paint generated from the large paint hood was observed. START members monitored the headspace inside the drum volatile organic compounds using a photoionization detector (PID). The readings ranged from 10 to 20 parts per million above background at approximately 2 inches from the surface of the material. Outside the drums, the PID did not detect any readings above background. No sample was collected from the drum.

After completing the reconnaissance, START member Bugg began to collect ACM samples from the pipe and boiler insulation. At 0955 hours, sample AS-1 was collected from pipe insulation located at the southeast section of the building. The sample was placed inside a plastic ziplock bag and labeled. At 0958 hours, sample AS-2 was collected from pipe insulation located approximately 30 yards west of sample AS-1. At 1003 hours, sample AS-3 was collected from debris inside the boiler room. After the final ACM sample was collected, grab soil samples were collected from two separate stained soil locations inside the transformer staging area. The transformer staging area was

approximately 200 square feet. At 1010 hours, sample S-1 was collected from stained soil at the western section of the transformer staging area. At 1020 hours, sample S-2 was collected from the eastern section of the staging area. Each soil sample was collected at a depth of 3 to 6 inches below the surface and analyzed for polychlorinated biphenyls (PCBs). The samples were properly stored with ice inside a cooler. At 1100 hours, the group demobilized from the site.

START labeled and secured the samples for shipment. START Kirchner delivered the samples to National Environmental Testing, Inc. (NET), on April 27, 1998.

VALUE OF



ယု

4. Analytical Results

A total of five samples, three ACM and two soil samples, were collected from the UAC site. The samples were delivered to NET at 850 West Bartlett Road, Bartlett, Illinois. The three ACM samples were analyzed by polarized light microscopy (PLM) to determine the asbestos concentration. The soil samples were analyzed using National Institute for Occupational Safety and Health (NIOSH) Method 8082 for PCBs. The OSC requested verbal results within two weeks of the delivery date and three weeks for a final analytical report. E & E generated a quality assurance/quality control (QA/QC) report on the analytical results (Attachment B). The analytical results are summarized in Table 4-1.

	Tabk ANALYTICAL RES UNITED AIR C HICAGO, COOK C JUNE 5	SULTS SUMM LEANER SIT COUNTY, ILL	E		
		Sam	ple Designatio	n a	
Parameter	AS-1*	AS-2ª	AS-3ª	S-1 ^b	S-2 ^b
Amosite (Percentage)	ND	ND	18%	NA	NA
Chrysotile (Percentage)	NA	30%	ND	NA NA	NA
PCB-1016 (mg/kg)	NA	NA	NA	<7.5	<7.7
PCB-1221 (mg/kg)	NA	NA	NA	<7.5	<7.7
PCB-1232 (mg/kg)	NA	NA	NA	< 7.5	<7.7
PCB-1242 (mg/kg)	NA	NA	NA	<7.5	<7.7
PCB-1248 (mg/kg)	NA	NA	NA	< 7.5	<7.7
PCB-1254 (mg/kg)	NA	NA	NA	< 7.5	<7.7
PCB-1260 (mg/kg)	NA NA	NA	NA	<7.5	< 7.7

Key:

1111

4. , 4

mg/kg = Milligrams per kilogram.

ND == Not detected or below detection limits of analytical method.

NA = Not analyzed.

= ACM bulk sample analyzed by PLM.

= Soil sample analyzed by NIOSH method 8082

Source: National Environmental Testing, Inc., Bartlett, Illinois, START analytical TDD S05-9804-809.

5. Discussion of Potential Threats

Conditions observed during the U.S. EPA investigation at the UAC site that constitute a threat to human health and/or the environment, and may be used to determine the appropriateness of a removal action, as outlined in Section 300.415 (b)(2) of the NCP, included:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or contaminants. The potential exists for the trespassers to come into contact with the material. Throughout the facility vandalism was apparent; several doorways on the south side of the site were broken into, allowing accessibility to the site from the street; material from the ceiling and pipes were removed, and the unwanted material was discarded on the floor of the site; broken waterlines from the sprinkler system were noted; and UAC documents were discarded throughout the site. The only visible evidence of friable asbestos was on the floor of the boiler room. The moisture in the boiler room was due to the broken waterline in the sprinkler system and the leaking roof. Additional areas in the building contained pipe insulation containing at least 30% asbestos; there areas were located at the southeast section of the site. The insulation was in fair condition and was not friable. The asbestos pipe insulation is present on site but is not in a friable state to pose immediate threats to human health and/or the environment. However, it may pose future threats due to aging of the insulation and additional vandalism to the property. The transformers on site were broken into, but the samples collected from the stained soil near the two transformers did not indicate PCB contamination in the soil.

11. 1

6. Removal Alternatives

Presently, the 2-acre site is for sale and U.S. EPA may request a deed restriction or a consent order for the present owners to properly remove ACM inside the boiler room before the property is sold. The quantity and the extent of contamination are not sufficient enough to require an emergency removal action by U.S. EPA. However, there is a concern of vandalism and trespassing on site property. To reduce the unauthorized entry into the UAC site, a temporary fence around the site should be installed.

11 19

7. Summary

1010

ACM is present on site. The main area of concern is in the boiler room where the ACM is present on the floor. The site is accessible from the street from several locations and trespassing is possible. The soil sample results concluded that the stained soil around the transformers did not contain PCB oils. START recommends the installation of a fence to secure the site and prevent further access by vandals.

Appendix A

+ 1 el-*

Photodocumentation



Site: UAC Date: April 23, 1998 Direction: E Photographer: R.Bugg

Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois

Subject: Northern section of the 25,000-square foot UAC building, which is for sale.



*Site: UAC Date: April 23, 1998 Direction: NE Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Southern section of the UAC building. The transformer area is connected to the small garage area.



Site: UAC Date: April 23, 1998 Direction: SE Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Front entrance of the United Air Cleaner site on Cottage Grove Avenue.



Site: UAC Date: April 23, 1998 Direction: SE Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Manufactured air filters left on site. General area was vandalized.



Site: UAC Date: April 23, 1998 Direction: SE Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Warehouse area facing Cottage Grove Avenue, directly south of the leaking sprinkler system.



Site: UAC Date: April 23, 1998 Direction: NW Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Flooded floor area on the western side of building, from the main line of the sprinkler system.



Site: UAC Date: April 23, 1998 Direction: W Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Equipment left on site. The bottom vat, which has oil-stained sides, contained a mixture of oil and water due to the leaking roof.



Site: UAC Date: April 23, 1998 Direction: E Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois

Subject: Empty warehouse area.



Site: UAC Date: April 23, 1998 Direction: W Photographer: R.Bugg Location: 9701 Cottage Grove Avenuue, Chicago, Cook County, Illinois Subject: Sample AS-2 was collected from the pipe insulation located at the south central area of the warehouse.



Site: UAC Date: April 23, 1998 Direction: E Photographer: R.Bugg Location: 9701 Cottage Grove Avenue, Chicago, Cook County, Illinois Subject: Deteriorating pipe insulation located on the far east wall of the building. Sample AS-1 was collected from the insulation.



Site: UAC Date: April 23, 1998 Direction: SW Photographer: K. Kirchner Location: 9701 Cottage Grove Avenuue, Chicago, Cook County, Illinois Subject: The transformer area, which was partially fenced. The area was located on the southern section outside the building.



Site: UAC Date: April 23, 1998 Direction: SW Photographer: R.Bugg Location: 9701 Cottage Grove Avenuue, Chicago, Cook County, Illinois Subject: START member Bugg collected a grab sample from the stained soil next to the eastern transformer. The sample was labeled S-2.

Appendix B

Analytical Data

· Minish

s iges it

B-1



33 North Dearborn Street Chicago, Il inois 60602

Tel. 312/578-9243, Fax: 312/578-9345

MEMORANDUM

DATE: June 29, 1998

Helsibil

TO: Ron Bugg, START Project Manager, E & E, Chicago,

Illinois

FROM: David Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager,

E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Polychlorinated Biphenyls

(PCBs), United Air Cleaner, Chicago, Cook County,

Illinois

REFERENCE: Project TDD S05-9804-008 Analytical TDD S05-9804-809

Project PAN 8A0801SIXX Analytical PAN 8AAI01TAXX

The data quality assurance (QA) review of two soil samples collected from the United Air Cleaner site is complete. The samples were collected on April 23, 1998, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Inc., Bartlett, Illinois. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8082.

Sample Identification

Identification No.	Identification No.
S-1	470325
S-2	470326

Data Qualifications:

I. Sample Holding Time: Acceptable

~~~~

The samples were collected on April 23, 1998, extracted on May 1, 1998, and analyzed on May 13 and 14, 1998. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

A 1 10 1 197.

United Air Cleaner Project TDD S05-9804-008 Analytical TDD S05-9804-809 PCBs Page 2

### II. <u>Instrument Performance: Acceptable</u>

The chromatographic resolution was adequate in the standard and sample chromatograms. Surrogate retention times were consistent in the samples and standards.

#### III. Calibrations:

## • Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSDs) between response factors were less than 20% for all PCBs.

#### • Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15%, as required.

#### IV. Blank: Acceptable

and f

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

## V. <u>Compound Identification: Not Applicable</u>

There were no detected PCBs in the samples.

#### VI. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples were within acceptable laboratory limits.

#### VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are acceptable for use.

Bartlett Division 850 West Bartlett Rd. Bartlett, IL 60103

Tel: (630) 289-3100 Fax: (630) 289-5445 Rockford Division 3548 35th Street Rockford, IL 61109

Tel: (815) 874-2171 Fax: (815) 874-5622 (800) 807-2877

## ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC

33 N. Dearborn

Suite 900

Chicago, IL 60602

05/19/1998

Sample No.: 470325

NET Job No.: 98.05497

Sample Description: (S-1) North East Corner

United Air Cleaner; S05-9804-809

Date Taken: 04/23/1998 Date Received: 04/27/1998

Time Taken: 10:10 Time Received: 13:45
IEPA Cert. No. 100221 WDNR Cert. No. 999447130

| Results  |                                                    | Units                                              | Date of<br>Analysis | Method<br>PQL                                                                                                                                                                                                                                                                                                 | Analyst                                                                                                                                                                                                                                                                                                                                                                                      |                    |                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ytical<br>thod                                                                                                                                                                                     |
|----------|----------------------------------------------------|----------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 66.9     |                                                    | *                                                  | 05/04/1998          | 0.1                                                                                                                                                                                                                                                                                                           | cao                                                                                                                                                                                                                                                                                                                                                                                          |                    | 2208                                                                                                                                                                        | 2540                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (4)                                                                                                                                                                                                |
| Complete |                                                    |                                                    | 05/01/1998          |                                                                                                                                                                                                                                                                                                               | rad                                                                                                                                                                                                                                                                                                                                                                                          | 244                |                                                                                                                                                                             | 5503                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (10)                                                                                                                                                                                               |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| <7.5     |                                                    | mg/Kg                                              | 05/14/1998          | 0.5                                                                                                                                                                                                                                                                                                           | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| 253.0    | MX                                                 | *                                                  | 05/14/1998          |                                                                                                                                                                                                                                                                                                               | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
| 97.0     |                                                    | *                                                  | 05/14/1998          |                                                                                                                                                                                                                                                                                                               | out                                                                                                                                                                                                                                                                                                                                                                                          | 244                | 711                                                                                                                                                                         | 8082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (1)                                                                                                                                                                                                |
|          | 66.9  Complete  <7.5 <7.5 <7.5 <7.5 <7.5 <7.5 <7.5 | 66.9  Complete  <7.5 <7.5 <7.5 <7.5 <7.5 <7.5 <7.5 | 66.9                | Analysis  66.9 % 05/04/1998  Complete 05/01/1998  <7.5 mg/Kg 05/14/1998  <7.5 mg/Kg 05/14/1998 | Analysis PQL  66.9 % 05/04/1998 0.1  Complete 05/01/1998  <7.5 mg/Kg 05/14/1998 0.5  <7.5 mg/Kg 05/14/1998 0.5 | Analysis PQL  66.9 | Analysis PQL Prepared For PQL PQL Prepared For PQL | Analysis PQL Prep/Run  66.9 % 05/04/1998 0.1 cao 2208  Complete 05/01/1998 rad 244  <7.5 mg/Kg 05/14/1998 0.5 out 244 711  <7.5 mg/Kg 05/14/1998 0.5 out 244 711 | Analysis PQL Prep/Run Me  66.9 \$ 05/04/1998 0.1 cao 2208 2540  Complete 05/01/1998 rad 244 5503 <pre> </pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre></pre></pre></pre></pre></pre></pre> |

PCB RESULTS ARE REPORTED ON A DRY WEIGHT BASIS

 $<sup>{}^{3}\</sup>text{C3}$  analysis was performed at a 10x dilution due to sample matrix.

<sup>14</sup>X : Surrogate recovery outside of the acceptance limits due to matrix interference.

Bartlett Division 850 West Bartlett Rd. Bartlett, IL 60103

Tel: (630) 289-3100 Fax: (630) 289-5445 Rockford Division 3548 35th Street Rockford, IL 61109

Tel: (815) 874-2171 Fax: (815) 874-5622 (800) 807-2877

## ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC 33 N. Dearborn

10:20

Suite 900

share!

Chicago, IL 60602

IEPA Cert. No. 100221

05/19/1998

Sample No. : 470326

NET Job No.: 98.05497

Sample Description: (S-2) North West Corner

United Air Cleaner; S05-9804-809

Date Taken: 04/23/1998 Date Received: 04/27/1998 Time Taken:

Time Received: 13:45 WDNR Cert. No. 999447130

| Parameter                                           | Results  |    | Units | Date of<br>Analysis | Method<br>PQL | Analyst |     | h No.<br>/Run | -    | tical<br>hod |
|-----------------------------------------------------|----------|----|-------|---------------------|---------------|---------|-----|---------------|------|--------------|
| Sclids, Total                                       | 65.0     |    | *     | 05/04/1998          | 0.1           | cao     |     | 2208          | 2540 | (4)          |
| FCE Non-Aqueous Extraction PCE'S NON-AQUEOUS - 8082 | Complete |    |       | 05/01/1998          |               | rad     | 244 |               | 5503 | (10)         |
| P(F-:016                                            | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| PCE -0 221                                          | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| PCE-1232                                            | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| PCE-1.242                                           | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| PCE-1248                                            | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| PCE-1254                                            | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| PCE-1260                                            | <7.7     |    | mg/Kg | 05/13/1998          | 0.5           | out     | 244 | 711           | 8082 | (1)          |
| Decachlorobiphenyl (Surr)                           | 250.0    | MX | *     | 05/13/1998          | NA            | out     | 244 | 711           | 8082 | (1)          |
| 2,4,5,6-TCMX (Surr)                                 | 96.0     |    | *     | 05/14/1998          | NA            | out     | 244 | 711           | 8082 | (1)          |

PCB RESULTS ARE REPORTED ON A DRY WEIGHT BASIS

PC3 analysis was performed at a 10x dilution due to sample matrix.

4X : Surregate recovery outside of the acceptance limts due to matrix interference.



33 North Dearborn Street Chicago, Illinois 60602

Tel. 312/578-9243, Fax: 312/578-9345

#### MEMORANDUM

DATE: June 29, 1998

TO: Ron Bugg, START Project Manager, E & E, Chicago,

Illinois

FROM: David Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager,

E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Asbestos, United Air Cleaner,

Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9804-008 Analytical TDD S05-9804-809

Project PAN 8A0801SIXX Analytical PAN 8AAI01TAXX

The data quality assurance (QA) review of three solid samples collected from the United Air Cleaner site is complete. samples were collected on April 23, 1998, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Inc., Bartlett, Illinois. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) 40 CFR , Part 763, Appendix A to Subpart F, using polarized light microscopy (PLM).

### Sample Identification

| START              | Laboratory         |
|--------------------|--------------------|
| Identification No. | Identification No. |
|                    |                    |
| AS-1               | 470322             |
| AS-2               | 470323             |
| AS-3               | 470324             |

United Air Cleaner Project TDD S05-9804-008 Analytical TDD S05-9804-809 Asbestos Page 2

## Data Qualifications:

物布料"

diam'r.

## I. Sample Holding Time: Acceptable

The samples were collected on April 23, 1998, and analyzed on May 5, 1998. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify a holding time for this parameter.

#### II. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.

From:

cedar>mkm

Subject: Asbestos Results

To:

bartlet>out

Cc:

10 tjairt ≥

05/06/98 Sent: R \_eived: 05/06/98

#### ANALYTICAL REPORT

Mr. Brian Wanner

05/06/1998

NET - BARTLETT

850 West Bartlett Road

Sample No.: 448925

Bartlett, IL 60103

Job Number: 98.04929

SAMPLE DESCRIPTION: #470322 98.05497 Ecology & Env.

Date Taken: 04/23/1998

Date Received: 05/01/1998

Analyst.

1mc:

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS % By Visual Date Estimation Flag Analyzed k L p Sample Color OW 05/05/1998

FIBROUS ASBESTIFORMS Actinolite/Tremolite ND Amosite ND Anthophylite ND Chrysotile 30 Crocidolite ND Total Fibrous Asbestiforms 30 OTHER FIBROUS COMPONENTS Cellulose NDFibrous Glass ND Synthetics ND Other ND NONFIBROUS COMPONENTS 70

All analyses are performed in accordance with EPA 40 CFR, Part 763, Appendix 1. to Subpart F using EPA's "Interim Method for the Determination of Asbestos in bulk Insulation Samples" and/or the Test Method "Method for the Determination of Asbestos in Bulk Building Materials".

ND means less than 1%, and % refers to percent by area. key to Flags:

#### ANALYTICAL REPORT

Mr. Brian Wanner 05/06/1998

NET - BARTLETT

.... iF

\* 4100

850 West Bartlett Road Sample No.: 448926 Bartlett, IL 60103 Job Number: 98.04929

SAMPLE DESCRIPTION: #470323 98.05497 Ecology & Env.

Date Taken: 04/23/1998 Date Received: 05/01/1998

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

|                            | % By Visual | _    | Date       |         |
|----------------------------|-------------|------|------------|---------|
|                            | Estimation  | Flag | Analyzed   | Analyst |
| Sample Color               | BR&GR       |      | 05/05/1998 | 1mc:    |
| FIBROUS ASBESTIFORMS       |             |      |            |         |
| Actinolite/Tremolite       | ND          |      |            |         |
| Amosite                    | ND          |      |            |         |
| Anthophylite               | ND          |      |            |         |
| Chrysotile                 | 30          |      |            |         |
| Crocidolite                | ND          |      |            |         |
| Total Fibrous Asbestiforms | 30          |      |            |         |
| OTHER FIBROUS COMPONENTS   | •           |      |            |         |
| Cellulose                  | 10          |      |            |         |
| Fibrous Glass              | ND          |      |            |         |
| Synthetics                 | ND          |      |            |         |
| Ot.her                     | ND          |      |            |         |
| NONFIBROUS COMPONENTS      | 60          |      |            |         |

All analyses are performed in accordance with EPA 40 CFR, Part 763, Appendix  $\it I$  to Subpart F using EPA's "Interim Method for the Determination of Asbestos in bulk Insulation Samples" and/or the Test Method "Method for the Determination of Asbestos in Bulk Building Materials".

ND means less than 1%, and % refers to percent by area. Fey to Flags:

#### ANALYTICAL REPORT

05/06/1998

Mr. Brian Wanner

NEI - BARTLETT

4 apres

850 West Bartlett Road Sample No.: 448927 Bartlett, IL 60103 Job Number: 98.04929

SAMPLE DESCRIPTION: #470324 98.05497 Ecology & Env.

Date Taken: 04/23/1998 Date Received: 05/01/1998

ASBESTOS IDENTIFICATION

| BULK SAMPLE ANALYSIS       |                           |      |                  |         |
|----------------------------|---------------------------|------|------------------|---------|
|                            | % By Visual<br>Estimation | Flag | Date<br>Analyzed | Analyst |
|                            | Beimaeion                 | 1149 | rmaryzea         | Andryse |
| Sample Color               | OW                        |      | 05/05/1998       | lmc     |
| FIBROUS ASBESTIFORMS       | •                         |      |                  |         |
| Actinolite/Tremolite       | ND                        |      |                  |         |
| Amosite                    | 18                        |      |                  |         |
| Anthophylite               | ND                        |      |                  |         |
| Chrysotile                 | ND                        |      |                  |         |
| Crocidolite                | ND                        |      |                  |         |
| Total Fibrous Asbestiforms | 18                        |      |                  |         |
| OTHER FIBROUS COMPONENTS   | •                         |      |                  |         |
| Cellulose                  | ND                        |      |                  |         |
| Fibrous Glass              | ND                        |      |                  |         |
| Synthetics                 | ND                        |      |                  |         |
| Other                      | ND                        |      |                  |         |
| NONFIBROUS COMPONENTS      | 82                        |      |                  |         |

All analyses are performed in accordance with EPA 40 CFR, Part 763, Appendix A to Subpart F using EPA's "Interim Method for the Determination of Asbestos in bulk Insulation Samples" and/or the Test Method "Method for the Determination of Asbestos in Bulk Building Materials".

ND means less than 1%, and % refers to percent by area. Key to Flags: